

VSPC 2CL HF 5VDC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



- Monitoring function with status indicator and message function
- Pluggable arrester, with no-interrupt and impedance-neutral plug-in and pull-out
- Can be tested with the V-TEST testing device
- High transmission rates with minimal attenuation values
- Space-saving design, with alert function and no extra space required
- Can be used in compliance with the IEC 62305 (**D1, C1 and C2**) installation standard
- Integrated PE foot, safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to PE
- Quick identification in the electrical cabinet with coloured labelling of the voltage levels
- Coding element for the different voltage levels provides safety

General ordering data

Version	Surge protection for instrumentation and control, without warning function / function indicator, $U_p(L/N-PE) < 800\text{ V}$
Order No.	8924430000
Type	VSPC 2CL HF 5VDC
GTIN (EAN)	4032248696062
Qty.	1 pc(s).

VSPC 2CL HF 5VDC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

Depth	69 mm	Depth (inches)	2.717 inch
Height	90 mm	Height (inches)	3.543 inch
Width	17.8 mm	Width (inches)	0.701 inch
Net weight	46 g		

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-40 °C...70 °C
Humidity	5...96 %		

Probability of failure

SIL in compliance with IEC 61508	3	MTTF	2,537 a
SFF	93.98 %	λ_{ges}	45
PFH in $1 \cdot 10^{-9}$ per hour	2.95		

Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL 497b Certificate
----------------------	---------	----------------	---------------------

CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input voltage, max. U_i	6.4 V
Internal capacity, max. C_i	10 nF	Internal inductance, max. L_i	0 μ H

General data

Number of poles	1	Protection degree	IP20
Colour	orange		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
--------------------	---	------------------------	-----

VSPC 2CL HF 5VDC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 μ s) GND-PE	10 kA
Discharge current $I_{\max}$ (8/20 μ s) wire-wire	10 kA
Discharge current I_n (8/20 μ s) wire-PE	2.5 kA
Fuse	0.5 A
Lightning test current, I_{imp} (10/350 μ s) Wire-PE	2.5 kA
Max. continuous voltage, U_c (DC)	6.4 V
Overload - failure mode	Modus 2
Protection level on output side Wire-PE 1 kV/ μ s, typically	450 V
Protection level on output side Wire-wire 8/20 μ s, typically	12 V
Protection level, U_p wire - PE	450 V
Pulse-reset capacity	≤ 20 ms
Rated voltage (DC)	5 V
Signal transmission properties (-3 dB)	103 MHz
Standards	IEC 61643-21, HART-compatible
Surge current-carrying capacity C2	5 kA 8/20 μ s
Surge current-carrying capacity D1	2.5 kA 10/350 μ s
Volume resistance	2.20 Ω

Discharge current $I_{\max}$ (8/20 μ s) wire-PE	2 x 10 kA
Discharge current I_n (8/20 μ s) GND-PE	2.5 kA
Discharge current I_n (8/20 μ s) wire-wire	2.5 kA
Lightning test current, I_{imp} (10/350 μ s) GND-PE	2.5 kA
Lightning test current, I_{imp} (10/350 μ s) wire-wire	2.5 kA
Number of poles	1
Protection level U_p (typ.)	<800 V
Protection level on output side Wire-wire 1 kV/ μ s, typically	12 V
Protection level, U_p GND - PE	800 V
Protection level, U_p wire - wire	12 V
Rated current I_N	450 mA
Requirements category acc. to IEC 61643-21	C1, C2, C3, D1
Signalling contact	No
Surge current-carrying capacity C1	<1 kA 8/20 μ s
Surge current-carrying capacity C3	100 A 10/1000 μ s
Voltage type	DC

Further details of approvals

GOST certificate	GOST-Zertifikat
------------------	-----------------

Connection data

Type of connection	Pluggable in VSPC BASE
--------------------	------------------------

Electrical data

Voltage type	DC
--------------	----

Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate
-----------------	-----------------

Guarantee

Time interval	5 years
---------------	---------

Classifications

ETIM 6.0	EC000943	ETIM 7.0	EC000943
ETIM 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 9.0	27-13-08-07
ECLASS 9.1	27-13-08-07	ECLASS 10.0	27-13-08-07
ECLASS 11.0	27-13-08-07	ECLASS 12.0	27-17-90-90
ECLASS 13.0	27-17-90-90	ECLASS 14.0	27-17-90-90
ECLASS 15.0	27-17-90-90		

VSPC 2CL HF 5VDC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Tender specification sheets

Long specification

Surge protection plug for use in connection with the base element VSPC BASE 2CL for two floating-ground driven paired cables, for IT use. Two-stage protection circuit consisting of coarse protection, decoupling resistors and fine protection between the signal wires and coarse common mode voltage protection to earth. Mechanical identification of the plug to the base element according to the switching type and rated voltage. Optical identification of the protected plug based on the type of protected switching and the voltage level. Protected plug with coding pin and counter-profile for the base element. It is possible to mark the plug.

Short specification

Surge protection plug for use in connection with the base element VSPC BASE 2CL for two floating-ground driven paired cables, for IT use, 5 V DC.

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a
REACH SVHC	Lead 7439-92-1
SCIP	71e97bb7-979f-4330-94c0-20c629bb05e3

Important note

Product information	Mode 2: State where the voltage-limiting part of the SPD was short-circuited due to a very low impedance within the SPD. The line is inoperable, but the measuring equipment is still protected by means of a short-circuit.
---------------------	--

Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319227/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319238/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319261/-T1z1mm-S800/
-----------------	---

ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UL)	E311081

VSPC 2CL HF 5VDC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Downloads

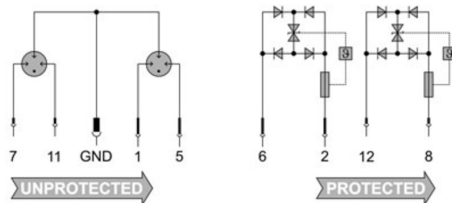
Approval/Certificate/Document of Conformity	SIL Paper EU_Konformitätserklärung / EU_Declaration_of_Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

VSPC 2CL HF 5VDC
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

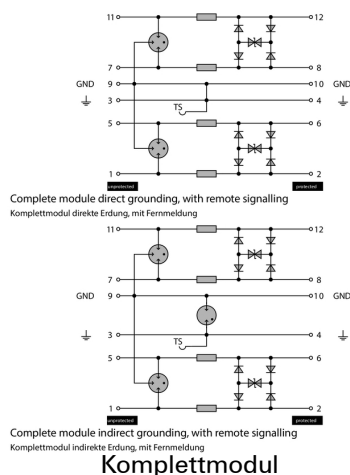
Germany

www.weidmueller.com
Drawings
Electric symbol


Similar to illustration

Cate- gory	Testing pulse	Surge voltage	Surge current	Pulse Type
C1	Quick- rising edge	0.5 - 2 kV with 1.2/50 µs	0.25 - 1 kA mit 8/20 µs	300 Surge voltage arrester
C2	Quick- rising edge	2 - 10 kV with 1.2/50 µs	1 - 5 kA mit 8/20 µs	10 Surge voltage arrester
C3	Quick- rising edge	≥ 1 kV with 1 kV/µs	10 - 100 A mit 10/10000 µs	300 Surge voltage arrester
D1	High power	≥ 1 kV	0.5 - 2.5 kA mit 10/350 µs	2 Arrester for lightning current and surge voltages

Discharge capacity



VSPC 2CL HF 5VDC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Plus



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/5 PLUS MC NE WS	Version
Order No.	1854490000	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4032248393596	Weidmueller, white
Qty.	1,000 pc(s).	

Direct earthing



Base element for the pluggable VSPC arrester, integrated PE foot in impedance-neutral VSPC BASE. Can safely discharge up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to the PE.

General ordering data

Type	VSPC BASE 2CL	Version
Order No.	8924710000	Surge protection, Flange-mounted housing, Flange-mounted housing
GTIN (EAN)	4032248696352	
Qty.	1 pc(s).	

VSPC 2CL HF 5VDC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Accessories****V-TEST testing device for VSPC****V-TEST**

- Testing device for checking the protective function of the pluggable overvoltage protection PU I, PU II and VSPC series
- Device for implementing the IEC 62305 standard (regarding periodic testing)
- Easy-to-use device with integrated battery set for on-site measurements
- LCD results display
- Menu in two languages
- Including a protective bag and power supply
- User friendly navigation in German and English

The V-TEST is a compact, portable test instrument for the plug-in surge protectors VARITECTOR (VSPC) and the surge protectors for the power supply line PU I and PU II. Using this instrument Weidmüller overvoltage protectors can be tested for their protective function in line with the testing schedules laid down in IEC 62305-3 (DIN VDE 0185 part 3). In a display with background illumination, the test result is indicated with "OK" or "Not OK".

General ordering data

Type	V-TEST	Version
Order No.	8951860000	Lightning and surge protection, Testing device
GTIN (EAN)	4032248743100	
Qty.	1 pc(s).	